

CLAIMS

1. (Amended) A communication system, comprising a first access router belonging to a first subnet, and a 5 second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio 10 communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of said second access router or of a default router in said second subnet to said second access router immediately after executing 15 the handover to said second subnet, acquires said link local address from said second access router and refers to said link local address when transmitting packet to outside of said second subnet after acquiring said link local address from said second access router.

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2. (Amended) A communication system, comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access 25 router and said second access router being connected via

IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet
5 requests a link local address of said second access router or of a default router in said second subnet to said second access router when transmitting a message V to notify connection to said second subnet immediately after executing the handover to said second subnet, and
10 acquires said link local address from said second access router.

3. (Amended) The communication system according to claim 2, wherein said mobile terminal is so arranged
15 that information to request of said link local address is added within said message V, and said second access router is so arranged that an RA message including said link local address is transmitted to said mobile terminal.

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4. (Amended) The communication system according to claim 2, wherein said mobile terminal is so arranged that information to request said link local address different from said message V is transmitted to said
25 second access router, and said second access router is

so arranged that an RA message including said link local address is transmitted to said mobile terminal.

5. (Amended) A communication system, comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said 10 first subnet or said second subnet via radio communication, wherein:

the mobile terminal connected to said first subnet requests a link local address of a second access router or of a default router in said second subnet to said 15 second access router, and acquires said link local address from said second access router; and said second access router is arranged to transmit an RA message including said link local address when receiving a message V to notify connection to said 20 second subnet from said mobile terminal.

6. (Amended) A communication system, comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access

router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein:

5 the mobile terminal connected to said first subnet requests a link local address to an arbitrary router belonging to said second subnet immediately after executing the handover to said second subnet, acquires said link local address from said arbitrary router,
10 identifies a default router in said second subnet, and refers to a link local address of said default router when transmitting packet to outside of said second subnet after identifying said default router.

15 7. (Amended) The communication system according to claim 6, wherein said mobile terminal is arranged to request said link local address to said arbitrary router when transmitting a message V to notify connection to said second subnet.

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8. (Amended) The communication system according to claim 7, wherein said mobile terminal multi-casts at least one of said message V or said message V added with information to instruct a request of said link local
25 address or information to request said link local

address different from said message V in said second subnet, and said default router in said second subnet transmits an RA message to said mobile terminal upon receipt of the information transmitted by said multi-
5 cast.

9. (Amended) A mobile terminal, comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein there are provided:

15 means for requesting a link local address of said second access router or of a default router in said second subnet to said second access router immediately after executing the handover from said first subnet to said second subnet;

20 means for receiving said link local address from said second access router; and
means for referring to said link local address when transmitting packet to outside of said second subnet after acquiring said link local address from said second
25 access router.

10. (Amended) A mobile terminal in a communication system, comprising a first access router belonging to a first subnet, and a second access router belonging to a 5 second subnet different from said first subnet, said first access router and said second access router being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein there are provided:

10 means for requesting a link local address of said second access router or of a default router in said second subnet to said second access router when transmitting a message V to notify connection to said second subnet immediately after executing the handover 15 from said first subnet to said second subnet;

means for receiving said link local address from said second access router;

means for adding information to instruct a request of said link local address in said message V;

20 means for receiving an RA message including said link local address from said second access router; and means for extracting said link local address from said RA message.

25 11. (Amended) A mobile terminal in a communication

system, comprising a first access router belonging to a first subnet, and a second access router belonging to a second subnet different from said first subnet, said first access router and said second access router 5 being connected via IP network, and a mobile terminal is connected to said first subnet or said second subnet via radio communication, wherein there are provided:

means for requesting a link local address to an arbitrary router belonging to said second subnet 10 immediately after executing handover from said first subnet to said second subnet; and means for receiving said link local address from said arbitrary router and for identifying a default router in said second subnet from said arbitrary router.

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12. (Amended) The mobile terminal according to claim 11, wherein there is provided means for referring to a link local address of said default router when packet is transmitted to outside of said second subnet after said 20 default router has been identified.

13. (Amended) The mobile terminal according to claim 11, wherein there is provided means for requesting said link local address to said arbitrary router when 25 transmitting a message V to notify connection to said

second subnet.

14. (Amended) The mobile terminal according to claim 12, wherein there is provided means for requesting said 5 link local address to said arbitrary router when transmitting a message V to notify connection to said second subnet.

15. (Amended) The mobile terminal according to claim 10 13, wherein there are provided:

means for multi-casting at least one of said message V or said message V added with information to request said link local address or information to request said link local address different from said message V in said 15 second subnet; and

means for receiving an RA message transmitted by said default router in said second subnet as a response to said multi-casting.

20 16. (Amended) The mobile terminal according to claim 14, wherein there are provided:

means for multi-casting at least one of said message V or said message V added with information to request said link local address or information to request said 25 link local address different from said message V in said

second subnet; and

means for receiving an RA message transmitted by said default router in said second subnet as a response to said multi-casting.

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17. (Amended) An access router in a communication system, being a second access router belonging to a second subnet different from a first subnet, to which a first access router belongs, said access router being connected to said first access router via IP network and can be connected to a mobile terminal via radio communication, wherein said access router comprises:

means for receiving information to request said link local address added in said message V as a request of a link local address of said second access router or of a default router in said second subnet from said mobile terminal when receiving a message V to notify connection to said second subnet from said mobile terminal immediately after executing the handover from said first subnet to said second subnet;

means for acquiring said link local address;

means for providing said link local address to said mobile terminal; and

means for transmitting an RA message including said link local address to said mobile terminal when

receiving said message V added with information to
request said link local address from said mobile
terminal.